

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-20. (Cancelled)

21. (New) A source of light of a spectrum of wavelengths extending over more than 300 nm, comprising a laser, which operates at or near its fundamental wavelength and produces pulses of a duration longer than 0.5 ns, and a micro-structured optical fiber arranged to guide the pulses, wherein the light is generated by the pulses in the fiber, in which the micro-structured fiber has a core having a diameter greater than 4 microns, and wherein the micro-structured optical fiber is arranged to support propagation of the light in a single transverse mode at all wavelengths in the spectrum of wavelengths.

22. (New) A source as claimed in claim 21, in which the laser is a monolithic laser.

23. (New) A source as claimed in claim 22, in which the monolithic laser is a microchip laser.

24. (New) A source as claimed in claim 21, in which the pulses of light are of a duration of more than 1 ns.

25. (New) A source as claimed in claim 21, in which the pulses have a peak power of less than 50 KW.
26. (New) A source as claimed in claim 21, in which the pulses have a peak power and interact with the fiber over a length of the fiber such that the peak power times the interaction length is less than 2 kWm.
27. (New) A source as claimed in claim 21, in which the spectrum extends over more than 500 nm.
28. (New) A source as claimed in claim 21, in which the fundamental wavelength is longer than 600 nm.
29. (New) A source as claimed in claim 21, in which the fundamental wavelength is in the range 1000 nm to 1100 nm.
30. (New) A source as claimed in claim 21, in which the micro-structured optical fiber has a zero dispersion wavelength λ_0 and the operating wavelength of the laser is less than the zero dispersion wavelength.
31. (New) A source as claimed in claim 21, in which the micro-structured optical fiber has a zero dispersion wavelength λ_0 and the operating wavelength of the laser is greater than the zero dispersion wavelength.

32. (New) A source as claimed in claim 21, in which the micro-structured optical fiber has a zero dispersion wavelength between 1000 nm and 1100 nm.

33. (New) A source as claimed in claim 21, in which the micro-structured optical fiber is arranged to support propagation of the pulses in a single transverse mode.

34. (New) A source as claimed in claim 21, in which the micro-structured optical fiber is arranged to support propagation of light at all wavelengths in a single transverse mode.

35. (New) A source as claimed in claim 21, in which the micro-structured fiber has a hole-to-hole pitch greater than 2.5 microns, such as greater than 2.7 microns, such as greater than 2.9 microns.

36. (New) A source as claimed in claim 21, in which the micro-structured fiber has a core having a diameter greater than 4.5 microns.

37. (New) A source as claimed in claim 21, in which the micro-structured fiber has a cladding region comprising an array of holes of diameter d and hole-to-hole pitch Λ , in which d/Λ is less than 0.7.

38. (New) A source as claimed in claim 21, in which the micro-structured fiber has an effective nonlinear area greater than $8 \mu\text{m}^2$.

39. (New) A source of light of a spectrum of wavelengths extending over more than 300 nm, comprising a laser, which operates at or near its fundamental wavelength in the range 1000 nm to 1100 nm and produces pulses of a duration longer than 0.5 ns, and a micro-structured optical fiber arranged to guide the pulses, wherein the light is generated by the pulses in the fiber, and in which the micro-structured optical fiber has a zero dispersion wavelength between 1000 nm and 1100 nm, and is arranged to support propagation of the light in a single transverse mode at all wavelengths in the spectrum of wavelengths.

40. (New) A method of generating light of a spectrum of wavelengths extending over 300 nm, comprising operating a monolithic laser at or near its fundamental wavelength to provide pulses of light of a duration longer than 0.5 ns and guiding the pulses in a micro-structured optical fiber, which is arranged to have a core with a diameter greater than 4 microns and to support propagation of the light in a single transverse mode at all wavelengths in the spectrum of wavelengths.